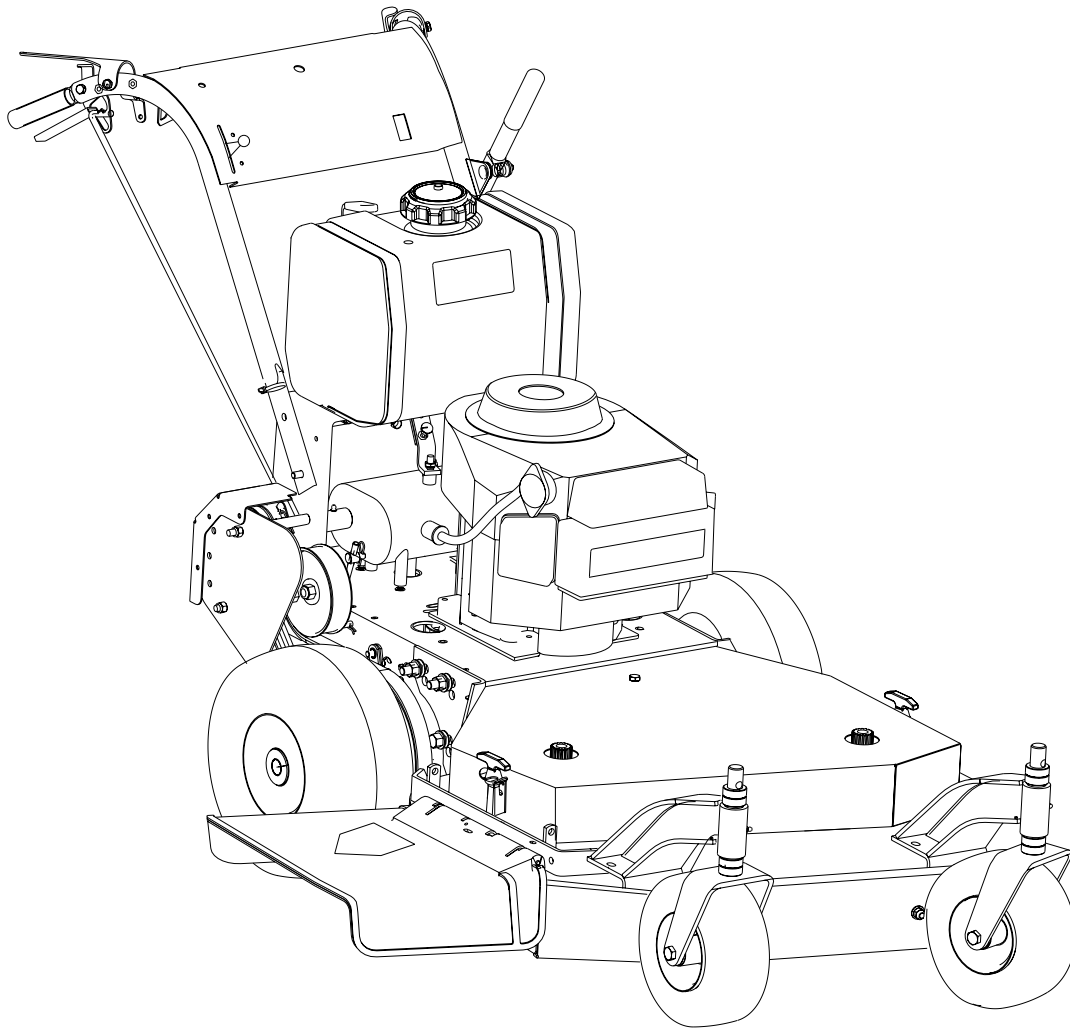




G1236

Walk-Behind Commercial Rotary Mowers

Professional Turf Equipment



OPERATOR'S AND SERVICE MANUAL

TABLE OF CONTENTS

Foreword	3
Safety Instructions	4
Slope Guide	7
Safety Labels	8
Product Specification	10
Assembly	11
Operation	12
Maintenance	17
Service and Adjustments	21
Off-Season Storage	24
Accessories and Attachments	24
Troubleshooting	25

MODEL NUMBER

Model Number.....

Serial Number.....

Date of Purchase.....

Record the model number, serial number and date of purchase above.

FOREWORD

The Cub Cadet Commercial, Walk-Behind, Rotary Mowers have been developed for use by professional landscapers, commercial lawn service companies, professional turf managers and golf course superintendents. The machines incorporate many safety features that should be studied by all operators and maintenance personnel before use. The list of safety precautions should receive particular attention. This manual presents the operating and maintenance instructions necessary to keep your Cub Cadet Commercial mower at peak efficiency. If properly operated and maintained, your Cub Cadet Commercial mower will give dependable and trouble-free service.

Although hazard control and accident prevention partially are dependent upon the design and configuration of the equipment, these factors are also dependent upon the awareness, concern, prudence, and proper training of the personnel involved in the operation, transport, maintenance and storage of the equipment.



CAUTION: THE Cub Cadet Commercial, Walk-Behind, Rotary Mowers should only be operated and maintained by thoroughly trained individuals. The machines could cause serious injury to anyone who misuses them or does not understand their operation. All operators and maintenance personnel are urged to read this entire manual for their personal safety.



WARNING-For the State of California

- The engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered, or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.
- In the State of California, the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar laws. Federal laws apply to federal lands. A spark arrester muffler may be available.



WARNING-For the State of California

- A person shall not sell, offer for sale, lease, or rent to a person any equipment that is powered by an internal combustion engine subject to Section 4442 or 4443, and not subject to Section 13005 of Health and Safety Code, unless that equipment has a permanent writing label attached that is in plain view to the operator that states, 'WARNING-Operation of This Equipment May Create Sparks That Can Start Fires Around Dry Vegetation. A Spark Arrester May be Required. The Operator Should Contact Local Fire Agencies For Laws or Regulations Relating to Fire Prevention Requirements.'

NOTE: The engine manufacturer is responsible for all engine-related issues with regards to performance, power-rating, specifications, warranty and service. Please refer to the engine manufacturer's owner's/operator's manual, packed separately with your unit, for more information.

This product may be covered by one or more of the following patents:
D415,503; 5,928,097; 6,012,274; 5,355,665; 6,226,966; 6,266,949

SAFETY



WARNING: This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol - **heed its warning**.

DANGER: This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

GENERAL

1. Read this Operator's Manual completely before starting the mower. Study the controls and learn the proper sequence of operation. Retain Operator's Manual in a safe place for future reference.

IMPORTANT: If the operator cannot read English or Spanish, the owner is responsible for explaining the information in this manual.

2. Do not allow anyone to operate or maintain this machine who has not read the manual. **Never permit children under the age of 16 to operate this machine.**
3. Always have your feet and hands clear of the cutter deck when starting the engine.
4. Do not remove any shields, guards, decals or safety devices. If a shield, guard, decal or safety device is damaged or does not function, repair or replace it before operating the mower.
5. Always wear safety glasses, long pants and safety shoes when operating or maintaining this mower. Do not wear loose-fitting clothing, or have loose long hair or jewelry.
6. Never run the engine indoors without adequate ventilation. Exhaust fumes are deadly.
7. To avoid serious burns, do not touch the engine or muffler while the engine is running or until it has cooled for at least 30 minutes after it has been shut off.
8. Do not allow anyone to ride on this mower. No passengers.
9. Do not operate this mower under the influence of alcohol and or drugs.
10. Do not operate or store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer, etc.
11. The owner is responsible for training the users, and is responsible for accidents or injuries occurring to themselves or others.

OPERATION



WARNING: Never mow in fifth gear (transport speed).

1. **Keep adults, children and pets away from the area to be mowed. (75 feet recommended)**
2. Never use this mower without the discharge chute installed and set in the down position (except when material collection system is used.)
3. Mow only in daylight or proper artificial light.
4. Always remove debris and other objects from the area to be mowed.
5. Watch for holes, sprinkler heads and other hidden hazards.
6. Reduce speed when making sharp turns.
7. Always have proper footing on slopes and hill sides and never operate when conditions are slippery.
8. Always keep both hands on the handles when mowing. Always walk, never run.
9. Never engage the blade clutch when the engine is running unless you are on grass that you intend to mow.
10. Be careful when crossing gravel paths or roadways. Always disengage the blade clutch and wait until the blades stop rotating.
11. Never leave the mower unattended without disengaging the blade clutch, shifting the transmission into neutral, placing the neutral latch levers in the neutral lock position, shutting off the engine, removing the key from the ignition switch and closing the fuel shutoff valve.
12. Always park the mower and start the engine on a level surface with the transmission in neutral, the blade clutch disengaged and the neutral latch levers in the neutral lock position.
13. Shut off the engine and wait for the blades to stop rotating before removing the grass catcher.
14. If you hit a solid object while mowing, disengage the blade clutch, shift the transmission into neutral, place the neutral latch levers in the neutral lock position and stop the engine. Disconnect the spark plug wire(s) and inspect for damage. Repair any damage and make sure the

blades are in good condition and the blade bolts are tight before restarting the engine.

15. Do not mow excessively steep slopes (No more than 15 degrees or a 26.8% grade). Mow across the slope.



WARNING: Do not mow up and down the slope. You could slip and slide into the mower, or the mower could lose traction and steering control.

16. Never raise the mower deck while the blades are rotating.
17. Never walk or stand on the discharge side of a mower with the engine running. Disengage the blade clutch if another person approaches while you are operating a mower.
18. Always disconnect the spark plug wire to prevent the engine from accidentally starting before performing any maintenance on this mower.
19. Keep the mower and especially the engine clean and free of grease, grass and leaves to reduce the chance of fire and to permit proper cooling.
20. The operator presence control levers located at each handle are designed for your safety. Do not try to defeat their operation. If the blade clutch is engaged or the transmission is in gear, releasing both handles will shut off the mower's engine.

MAINTENANCE AND STORAGE



WARNING: Never let children or untrained people operate or service this mower.

1. Never tamper with safety devices. Check their proper operation regularly.
2. Check bolts and screws for proper tightness at frequent intervals to keep the machine in safe working condition. Also, visually inspect machine for any damage and repair, if needed.
3. Before cleaning, repairing, or inspecting, stop the engine and make certain all moving parts have stopped. Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.
4. Do not change the engine governor settings or overspeed the engine. The governor controls the maximum safe operating speed of the engine.
5. Maintain or replace safety and instruction labels, as necessary.
6. Follow this manual for safe loading, unloading, transporting, and storage of this machine. (See page 16 and page 24)
7. Never store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer, etc.
8. Always refer to the operator's manual for proper instructions on off-season storage. (See page 24)
9. If the fuel tank has to be drained, do this outdoors.

Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.

RELATED TO FUEL

1. Fuel is highly flammable and its vapors can explode if ignited. Please respect it.
2. Do not smoke or permit others to smoke while handling fuel.
3. Always use approved containers for fuel and fill slowly to decrease the chance of static electricity buildup and spillage.
4. Store fuel in well ventilated and unoccupied buildings away from sparks and flames.
5. When dispensing gasoline into approved containers, place the container on the ground when refueling to avoid a possible static electricity ignition of fuel vapors.
6. Do not fill containers while it is inside a vehicle, trunk, the bed of a pickup or floor of a trailer.
7. Always shut off the engine and permit it to cool before removing the fuel tank cap.
8. Always fill the fuel tank outdoors.
9. If the fuel container spout will not fit inside the fuel tank opening, use a funnel.
10. When filling the fuel tank, stop when the fuel reaches one inch from the top. This space is necessary for tank expansion. **Do not overfill.**
11. Wipe up any spilled fuel.
12. Do not operate or store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer, etc.

SLOPE OPERATION

DO:

- Mow across slopes, and exercise caution when turning or changing direction.
- Watch for holes, ruts or bumps and hidden objects.
- Be sure of your footing. A slip could cause personal injury.
- Check the area thoroughly before mowing.
- Slow down and use extra care.

DO NOT:

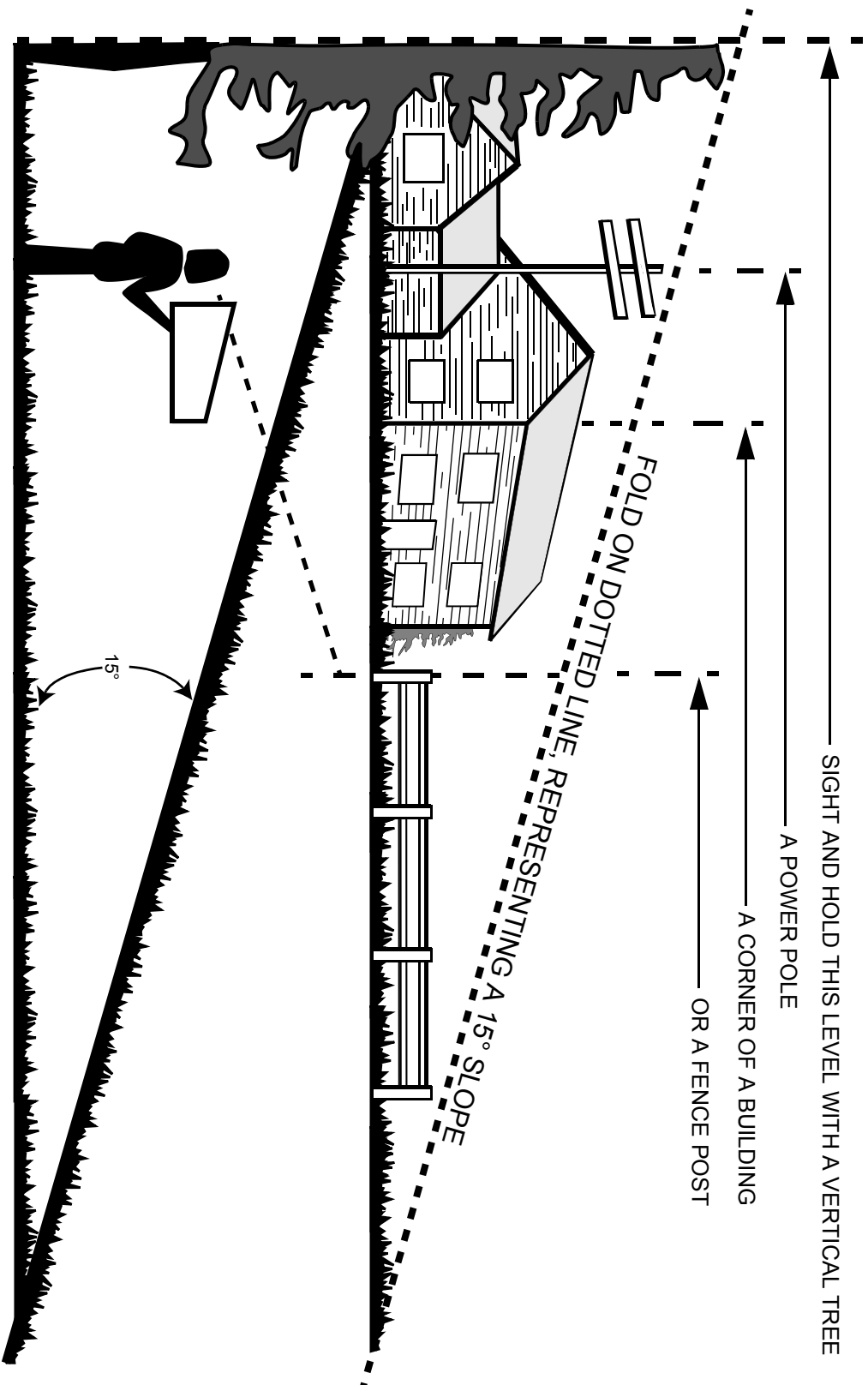
- **Do not** mow up and down slopes.
- **Do not** mow near drop offs, ditches, embankments, etc. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- **Do not** mow on wet or slippery grass. Reduced traction could cause sliding.
- **Do not** mow on slopes greater than 15 degrees as shown on the slope gauge.

FIRST TIME OPERATORS

- Start off in a flat, open, area.
- Keep bystanders away.
- Set the throttle to low speed.
- Practice maneuvering (forward, turn left, turn right, reverse), without the mower deck engaged.

SLOPE GUIDE

USE THIS PAGE AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.



WARNING

Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

Operate ZERO-TURN mowers across the face of slopes, never up and down slopes.
Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

SAFETY LABELS

WARNING

OPEN BELT DRIVE

**STOP ENGINE BEFORE
REACHING UNDERNEATH**

Part Number: 01001035

**PLACE FOOT HERE
WHEN STARTING**

Part Number: 777I22931



WARNING

- TURN OFF ENGINE AND ALLOW TO COOL BEFORE REFUELING.
- DO NOT SMOKE NEAR FUEL.

Part Number: 01001036

**CLOSE FUEL VALVE
WHEN MACHINE IS
NOT IN USE.**



**IF VALVE IS LEFT OPEN,
SEVERE ENGINE DAMAGE
OR HARD STARTING MAY
RESULT FROM FLOODING.**

Part Number: 777I22930

	⚠ DANGER AVOID SERIOUS INJURY OR DEATH • KEEP HANDS AND FEET AWAY FROM ROTATING PARTS. • REMOVE OBJECTS THAT CAN BE THROWN BY THE BLADE IN ANY DIRECTION. WEAR SAFETY GLASSES. • DO NOT MOW WHEN CHILDREN OR OTHERS ARE AROUND. • USE EXTRA CAUTION ON SLOPES. DO NOT MOW SLOPES GREATER THAN 15°. MOW ACROSS NEVER UP AND DOWN. NEVER PULL MOWER CLOSE TO YOUR FEET. LOOK DOWN AND BEHIND BEFORE AND WHILE MOVING BACKWARDS.	
MAX 15° READ OPERATOR'S MANUAL . KEEP SAFETY DEVICES (BLADE CONTROL, TRAILING SHIELD, DISCHARGE COVER, ETC.) IN PLACE AND WORKING. IF DAMAGED, REPLACE IMMEDIATELY.		

Part Number: 777S30116

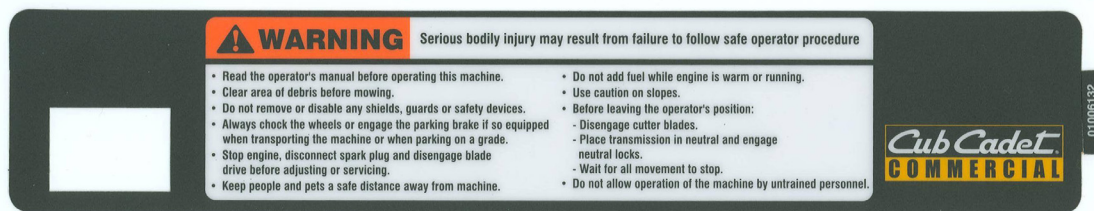


WARNING
SHIELD MISSING
DO NOT OPERATE

Part Number: 00030635



Part Number: 01006668



Part Number: 01006132



Part Number: 01002166



Part Number: 777S30503



Part Number: 777I22929



Part Number: 777D12837

PRODUCT SPECIFICATION

GENERAL INFO.

Controls:	Engine ignition; throttle; choke; left and right operator presence levers; left and right steering/brakes; blade clutch; transmission shift
Parking:	Transmission in 1st, neutral latches released, rear wheels chocked in front
Frame:	7 gauge steel
Front Caster Wheels:	9 x 4.0-5 semi-pneumatic
Drive Wheels:	13 x 6.50-6 pneumatic, 10-12 psi
Fuel Tank:	5 gallons, regular unleaded
Ground Speed: (approximate)	1st=2.0mph, 2nd=2.6mph, 3rd=3.1mph, 4th=4.0mph, 5th=6.0mph, Reverse=2.2mph
Net Weight:	460 lbs

ENGINE INFO.

Engine:	12.5 Briggs I/C, recoil start, dual element air cleaner
Oil Type:	SAE 15W40, 1.2 quart
Spark plug:	759-3336, 0.030" gap

TRACTION DRIVE INFO.

Traction Drive:	5 speed forward with reverse assist
------------------------	-------------------------------------

CUTTER DECK INFO.

Cutter Deck; Drive:	36" fabricated steel; belt driven
Cutting Height:	2" to 4" in 1/4" increments
No. of Blades	2 at 18" long
Spindle:	aluminum housing with taper roller bearings, greasable
Pulleys:	machined-cast iron for drive

ASSEMBLY

IMPORTANT: This unit is shipped **with oil in the engine**. After assembly, see OPERATION section of this manual for fuel and engine oil details.

NOTE: *Reference to right and left hand side of the mower is observed from the operating position.*

This pedestrian controlled wide area mower has been completely assembled at the factory.

LOOSE PARTS IN CARTON

The following items are packaged in a bag:
Operator's Manual and Engine Manual

TOOLS NEEDED FOR ASSEMBLY

A tire Gauge

REMOVING THE UNIT FROM THE CRATE

1. Cut straps securing unit to pallet.
2. Remove any protective packaging and plastic tie straps.

REMOVING THE CHUTE STRAP

1. Locate the chute strap which secures the discharge chute in a vertical position.
2. Pull chute back towards the engine. While holding the chute with one hand, cut the strap with the other hand.

FINAL ADJUSTMENTS

Tire Pressure

The recommended operating rear tire pressure is 10-12 psi. The caster wheels are semi-pneumatic and do not require air pressure. Check the tire pressure periodically and maintain equal pressure in both rear tires at all times.

IMPORTANT: Refer to the tire sidewall for exact tire manufacturer's recommended or maximum psi. Do not overinflate. Uneven tire pressure could cause the cutting deck to mow unevenly.

OPERATION

Know Your Mower

Read this operator's manual and safety rules before operating your Mower. Compare the illustrations below with your equipment to familiarize yourself with the location of various controls, safety signs and adjustments. Save this manual for future reference.

The operation of any lawn mower can result in foreign objects being thrown into the eyes, which can damage your eye severely. **Always wear safety glasses**, while operating the mower or while performing any adjustments or repairs on it. Check local regulations, hard hats and hearing protection may be required! Use only approved accessories and attachments.

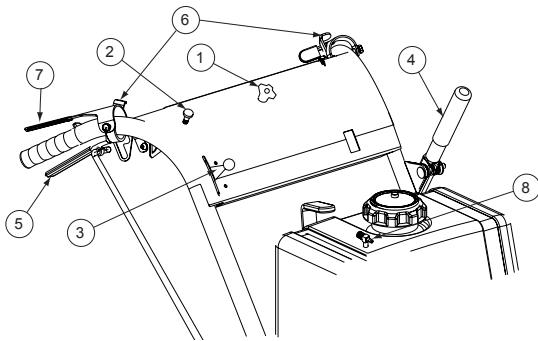


Figure 1 The Control Panel

- | | |
|-------------------------------|-------------------------|
| 1. Ignition Switch | 2. Choke |
| 3. Engine Throttle | 4. Blade Clutch lever |
| 5. Right Steering Brake Lever | 6. Neutral Latch Levers |
| 7. Operator Presence Lever | 8. Fuel Shutoff Valve |

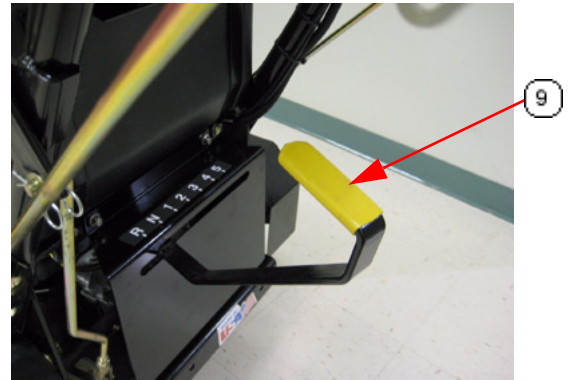


Figure 2 View Looking Under The Fuel Tank

9. Transmission Shift Lever

OPERATING CONTROLS (See Figure 1 & 2)

Ignition Switch:

Located in the center of the control panel between the handles. When the key is inserted and turned clockwise 90 degrees, the engine can be started if the transmission shift lever is in neutral and the blade clutch is disengaged.

Choke:

Located on the control panel and is activated by pulling upward. Activating the choke control closes the choke plate on the carburetor and aids in starting the engine.

Engine Throttle:

Located on the right side of the control panel between the handles. Moving the throttle lever upward will increase the engine speed from slow to fast.

Blade Clutch:

Located on the left handle below the control panel. This is an over-center belt clutch. When the handle is pushed forward it snaps to rest and forces the idler pulley into the blade drive belt causing the blades to rotate. Pull back the handle and the pressure on the belt is relieved and the blades stop rotating.

IMPORTANT: To avoid engine stalling, slowly engage the lever.

Steering Brake Levers:

There is a right-hand lever located beneath the outer end of the right handle and a left-hand lever located beneath the outer end of the left handle. Each lever operates independently and when squeezed against spring tension, lifts the idler pulley from applying pressure to the traction drive belt on the right or left side and applies the right or left side brake when squeezed tightly. When the levers are released, the mower will move ahead in a straight line if the engine is running and the transmission is engaged in a forward gear. Steering is accomplished by squeezing the steering/brake lever on the side to which the turn is to be made. A slight lever squeeze will allow belt slippage and provide a gentle turn. Squeezing the lever such that the neutral latch could be engaged will provide a sharp turn, and continued lever squeezing will apply the brake providing a pivot turn.

Neutral Latch Levers:

Pivoted inside each handle, there is a neutral latch lever which works with each of the steering/brake levers. When either of the steering/brake levers is

Meets ANSI B71.4 safety standards

This pedestrian controlled wide area mower conforms to the safety standard of the American National Standards Institute (ANSI).

squeezed and its neutral latch lever pushed forward and engaged in the neutral lock position, the steering/brake lever is held in a position where the idler pulley is not applying pressure to the traction drive belt and the brake is not engaged.

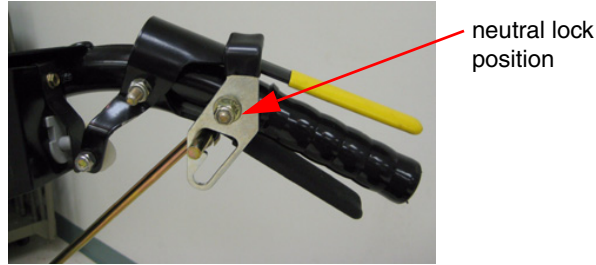


Figure 3

IMPORTANT: The neutral latch levers must be engaged in the neutral lock position before starting the engine. They should not be loose so that they will stay in the unlocked position unless moved.

Operator Presence Levers:

Located above the outer ends of the right and left handles, at least one of these operator presence levers must be held down on the handles against spring pressure in order to shift the transmission shift lever into gear or engage the blade clutch. Releasing the operator presence levers with either the transmission shift lever in gear or the blade clutch engaged will shut off the engine.

IMPORTANT: One or both operator presence levers must be depressed when in gear or mowing.

Fuel Shutoff Valve:

Located on top of the fuel tank is the fuel shutoff valve. The handle turns 90 degrees. When the handle is in a horizontal position, it will shut off the flow of fuel to the engine. When it is turned to a vertical position, it will open and allow fuel to flow to the engine. Anytime the mower is being trailered or, if the mower will not be in use for 30 minutes or more, close the fuel shutoff valve to prevent flooding the engine.

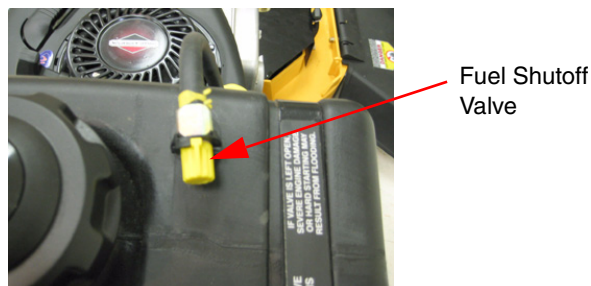


Figure 4

Transmission Shift Lever:

Located under the control panel. The lever has seven positions moving from the left to the right: Reverse Gear, Neutral, First Gear, Second Gear, Third Gear, Fourth Gear and Fifth Gear. The lever

must be in the Neutral position in order to start the engine. Never attempt to mow in Fifth Gear. Fifth Gear should be used for transport only.

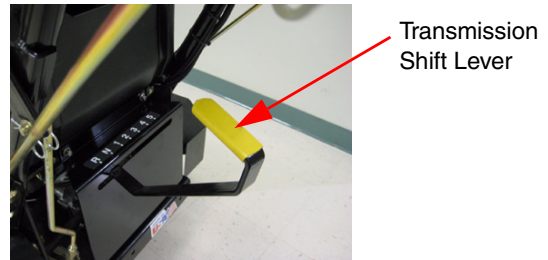


Figure 5

IMPORTANT: DO NOT shift the transmission from one forward gear to another while unit is moving. Stop forward travel, shift gear, then resume movement.

GAS AND OIL FILL-UP

Oil

IMPORTANT: The mower is shipped with motor oil in the engine; however, you MUST check the oil level before operating. Oil should be changed once after the first five hours of operation and every 40 hours of operation thereafter. Use the grade of engine oil specified in the Maintenance section.

- Remove oil fill dipstick from the oil fill tube.
- Check that the level of oil is up to the FULL mark on the dipstick. If needed, pour oil slowly into the oil fill tube until a FULL oil level is achieved.
- Replace oil fill dipstick and tighten.

Gasoline

- Remove fuel cap from the fuel tank.
- Make sure the container from which you will pour the gasoline is clean and free from rust or foreign particles. Never use gasoline that may be stale from long periods of storage in its container. Gasoline that has been sitting for any period longer than four weeks should be considered stale.
- Fill fuel tank with clean, fresh, unleaded regular gasoline (87 ROM) only no more than one inch below bottom of filler neck to provide space for fuel expansion. Replace fuel cap.
- To avoid engine problems, the fuel system should be emptied before storage for 30 days or longer. Drain the fuel by shutting off the fuel valve and running the engine until it stops. Use fresh fuel next season. See STORAGE section for additional information.



DANGER: Never refuel or drain the fuel system indoors, or operate or store near an open flame, spark, or ignition source.

- Check the fuel level periodically to avoid running out of gasoline while operating the mower.

INITIAL ADJUSTMENTS

1. Disconnect the spark plug wire.
2. Check that all nuts, bolts and screws are tight.
3. Check the tension of the deck drive belts:
 - a. Remove the deck cover shield and engage the blade clutch.
 - b. Make sure the belts clear the belt guides by 1/8" to 1/4".
 - c. The tension of the deck drive belts should be adjusted so that a ten-pound pull between two pulleys deflects each belt about 1/2" (See Figure 19 page 19). Do not overtighten these belts. The blade clutch should engage with only moderate force.
 - d. Replace the deck cover shield and disengage the blade clutch.
4. The tension of the transmission drive belt should be adjusted so that a five-pound pull between the engine traction drive pulley and the transmission drive pulley deflects the belt about 3/16". (See Figure 20 page 20)
5. The two drive wheel belts are self-adjusting.
6. The steering control rods on each side of the handle assembly should initially be adjusted so that there is about a 1/4" to 3/8" space between the rod and the bottom of the slot in the neutral latch lever with the latch in the drive position (See Figure 6.) To make this adjustment, remove the large hairpin from the swivel joint at the bottom of each steering control rod and thread the swivel joint up or down the rod as needed.

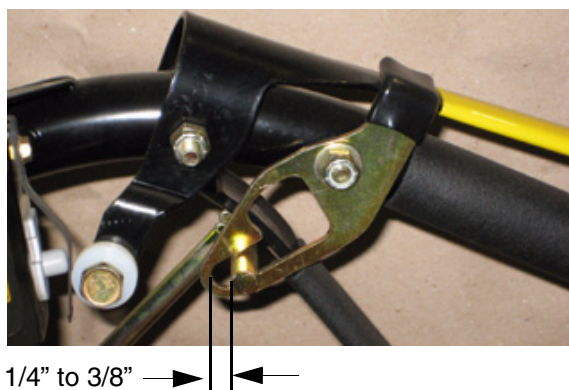


Figure 6

7. The brake rods (above each drive wheel) should be adjusted so that when the steering/brake levers are squeezed and the mower is pulled backward, the brakes lock the drive wheels. The machine should roll freely when the neutral latch lever is in the neutral lock position. To adjust the brake rods, remove the large hairpin from the swivel joint at the top of each brake rod and thread the swivel joint up or down the rod as

needed.

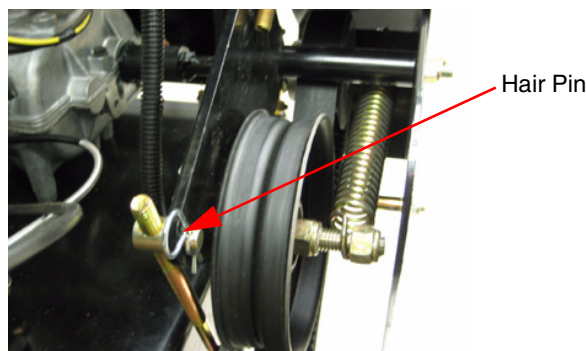


Figure 7

8. Adjusting the cutting height: The mower is shipped with the cutting height set at 3 inches \pm 1/4 inch depending on the air pressure in the tires. To change the cutting height, blade spacers and/or caster spacers must be moved according to the cutting height adjustment table. (Figure 24 and 25, page 22)
9. Lubricate all fittings listed in the maintenance section.

TO START THE MOWER

IMPORTANT: First time operators should refer to the procedure stated on page 5.



WARNING: Never run the engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, a deadly, odorless gas.

1. Make certain you thoroughly understand all of the safety precautions before you attempt to operate this machine.
2. Move the mower outdoors to a "test area" where you can operate the mower for about half an hour without being disturbed.
3. Shift the transmission to neutral (N) position.
4. Disengage the blade clutch.
5. Place the neutral latch levers in the neutral lock position.
6. Connect the spark plug wire.
7. Open the fuel shutoff valve.
8. Move the throttle lever to a mid range position and pull the "Choke" all the way out.
9. Put the key in the ignition switch and turn the switch on.
10. To start engine using recoil starter:
 - a. Stand on left side (as viewed from behind handlebars) of machine. Be sure your feet are safely away from the underside of the mower deck and all mower controls are released. Stabilize mower by placing foot

as indicated below in Figure 8.



Figure 8

- b. Grasp starter rope handle and pull slowly until rope pulls slightly harder. Let rope rewind slowly. Then pull rope with a rapid, full arm stroke. Let rope return slowly. If engine fails to start after three pulls, repeat instructions (try setting throttle at fast setting).
- c. When engine starts, operate in fast throttle setting (move choke control to off).

KNOW YOUR MOWER

1. After the engine has warmed up, shut off the ignition and check the operation of the safety switches. Make certain that the engine will not start unless the ignition switch is turned on, the transmission is in neutral and the blade clutch is disengaged. Place the neutral latch levers in the neutral lock position. If the engine will start with the transmission in any gear (not neutral), immediately shut off the engine and contact customer service. If the engine will start with the blade clutch engaged, immediately shut off the engine and contact customer service. To check operator presence controls:
 - a. Start the engine and hold the left operator presence control lever down against the left handle and move the transmission shift lever into first gear. Now take your hand off the operator presence control lever and the engine should die. If it does not, immediately shut off the engine and contact customer service.
 - b. Repeat this procedure using the right operator presence control lever.
 - c. Shift the transmission into neutral, restart the engine, hold one of the operator presence controls down against the handle and engage the blade clutch. Now take your hand off of the operator presence lever and the engine should die. If it does not, immediately shut off the engine and disengage the blade clutch and contact customer service.

2. With the neutral latch levers engaged restart the engine.
3. Push the blade clutch lever forward until it engages and the cutter blades start rotating.
4. Shift the transmission into first gear. (It is suggested that you practice mowing in first gear.)
5. Squeeze both steering/brake levers with both hands and release the neutral latch levers from the neutral lock position.
6. Slowly release the steering/brake levers and the mower will move ahead in a straight line. To turn the mower, squeeze the steering/brake lever on the side to which you want to turn.
7. To stop the mower's forward motion, squeeze both steering/brake levers until the mower stops and place the neutral latch levers into the neutral lock position.

IMPORTANT: Squeezing the control levers from the released position to the Neutral lock position releases traction-drive belt tension. Additional squeezing of these levers applies the service brakes. Applying the left brake will create a counter clockwise pivot or u-turn and applying the right brake will create a clockwise pivot or u-turn. Applying both brakes will stop the machine without turning.

8. Before shifting into reverse gear, the mower's forward motion must be completely stopped. For maximum traction in reverse, the steering/brake levers should be pushed downward.



DANGER: Look behind the mower before and during Reverse operation. Stop the mower blades before operating in Reverse.



WARNING: To avoid possible bodily injury and to prevent damage to the transmission, the mower must be completely stopped before attempting to shift from forward to reverse or reverse to forward.

9. Practice operating the mower and as you gain confidence, shift the transmission from first to second and mow for a while and then shift from second to third. Mow for at least one-half hour and then return the mower to the shop.



WARNING: The machine should not be shifted-on-the-go as transmission damage could occur, causing the machine to suddenly stop! Stop the machine, then shift.

10. To stop and shut off the mower, squeeze both steering/brake levers and place the neutral latch levers into the neutral lock position, disengage the blade clutch, shift the transmission into neutral, turn off the ignition to stop the engine, close the fuel shutoff valve and disconnect the spark plug wire.
11. Check that all nuts, bolts and screws are still tight.
12. Check, and adjust if necessary, the tension of the deck drive belts and the transmission drive belt as described in items 3 and 4 of the Initial Adjustment section

13. Readjust the steering control rods and the brake rods. They may require frequent adjustment until the belts and brake bands have properly seated. These adjustments are described in items 6 and 7 of the Initial Adjustment section.
14. After the first full day of mowing, all nuts, bolt and screws should be rechecked for proper tightness and the belts should be rechecked for proper tension.

USING THE MOWER

IMPORTANT: First time operators should refer to the procedure stated on page 5.

1. Be sure area is clear of rocks, sticks, toys, wire, or other objects that could be thrown by the mower. Survey the entire area to be mowed. Make sure that the accessories and attachments would be suitable for use on the terrain.
2. With the neutral latches locked and the operator presence levers depressed, select a mowing speed. (a slower speed is suggested during first time use.)
3. Engage the mower by pushing the blade clutch lever forward until it locks.
4. Squeeze the steering control levers and release the neutral latches.
5. Slowly release the steering control levers and the mower should go straight ahead.
6. To operate in Reverse, look behind and down before backing up to be sure the path is clear.
7. Be aware of the mower discharge and do not point it at anyone, or onto sidewalks and streets.
8. Use care when approaching blind corners, shrubs, trees or other objects that could obstruct vision.
9. To mow grass and produce a striped pattern:
 - a. Pick a point on the opposite side of the area to be mowed (post, tree, shrub, etc).
 - b. If on a hillside, start at the bottom so that the turns are uphill rather than downhill.
 - c. Align the mower so as to head directly toward the object on the far side.
 - d. Slowly increase the speed of the machine to match cutting conditions, terrain, and operator familiarity with the controls and keep the machine headed directly toward the alignment object. Do not go fast as to reduce cut quality or to be uncomfortable in controlling the speed and direction of the machine.
 - e. When approaching the other end of a strip, slow down or stop before turning. A U-turn is recommended.
 - f. To prevent rutting or grooving of the turf, change the direction that the strips are mowed by approximately 45 degrees the next and each subsequent time that the

area is mowed.

- g. If the grass is repeatedly mowed in the same direction, it will be "trained" so that the Striped appearance is more pronounced and longer lasting. Grooving of the turf from the tires will occur.
10. For emptying material collection systems or for any other operation involving the mower deck, before leaving the operator station:
 - shut off the mower deck.
 - place the transmission in neutral.
 - latch the neutral locks.
 - shut off the engine.
 - apply wheel chocks.

TRANSPORTING MOWER

1. If ramps are used, be sure they are secured to the trailer, truck bed, etc. and are designed for the application.
2. The mower should be pushed or pulled onto or off the trailer, truck bed, etc., never try to drive it on.
3. Turn the fuel valve off.
4. Secure mower with chocks, straps, etc.
5. Make sure accessories and attachments are secured or removed.

MAINTENANCE

GENERAL RECOMMENDATIONS



WARNING: Never let children or untrained people operate or service the mower.

- Always observe safety rules when performing any type of maintenance on the mower.
- The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain the equipment as instructed in this manual.
- Changing of engine-governed speed will void engine warranty.
- Periodically check all fasteners and make sure they are tight.



WARNING: Always stop the engine and disconnect and ground the spark plug wire before performing any maintenance or adjustments.

Engine Oil: Use Shell Rimula 15W40 oil or any 10W30 or 15W40 oil rated SJ or higher.

Spindle Lubricant: Use only Shell Alvania RL 2 grease. This grease is an amber-colored grease designed for high speed bearing applications. It has a base oil viscosity that reduces running losses, has been formulated for low noise, has excellent corrosion protection, and has excellent bearing lubrication.

General Purpose Lubrication: Use any NLGI grade 2 multi-purpose grease. Shell Albida EP2 is recommended. Shell Albida EP 2 is a red-colored multi-purpose grease designed for heavy-duty bearing applications. It has high base oil viscosity for mechanical stability, has been formulated for high load, low-speed applications, and has excellent lubrication and corrosion protection.

LUBRICATION (See Figures 9, 10 & 11)

Daily

- **Cutter Blade Spindle Bearings-** There are two grease positions. See Figure 9 item A.
- **Caster Wheel Bearing-** There are two grease positions. See Figure 9 item B.
- **Caster Wheel Pivot Shafts-** There are two grease positions. See Figure 9 item C.
- **Deck Idler Pulley Pivot Arms-** There is one grease position. See Figure 9 item D.

Every 40 Hours

- **Drive Wheel Bearings-** There are two grease positions. See Figure 10 item E.
- **Brake Lever Pivots-** There are two grease positions. See Figure 10 item F.
- **Blade Clutch Bellcrank Pivot-** There is one grease position. See Figure 11 item G.

- **Transmission-Jackshaft Couplers-** There are two grease positions. See Figure 11 item H

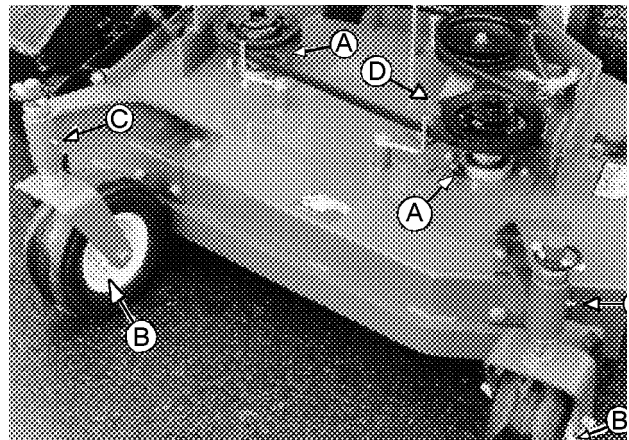


Figure 9

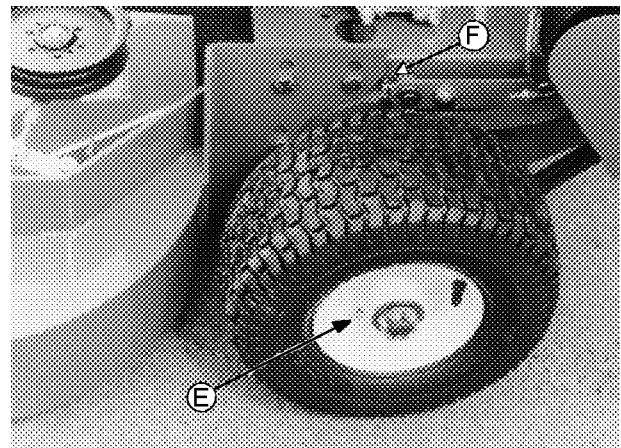
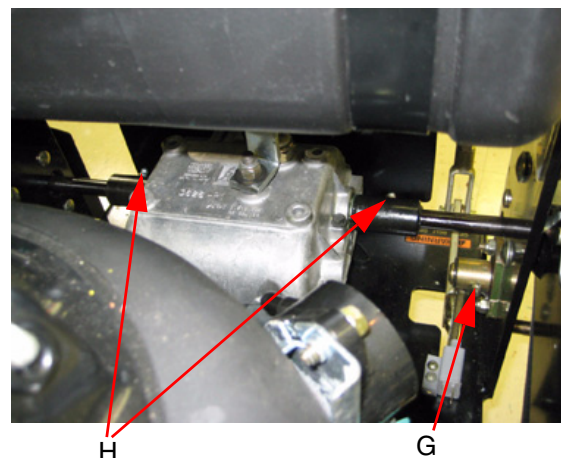


Figure 10



View looking from the front

Figure 11

ENGINE MAINTENANCE

For detailed maintenance instructions for the engine on your mower, see the separate engine manual packed with your mower.

CHANGING ENGINE OIL

1. Place a container underneath the mower on the right hand side.
2. Remove oil drain plug, and replace when oil stops draining. (See Figure 12)

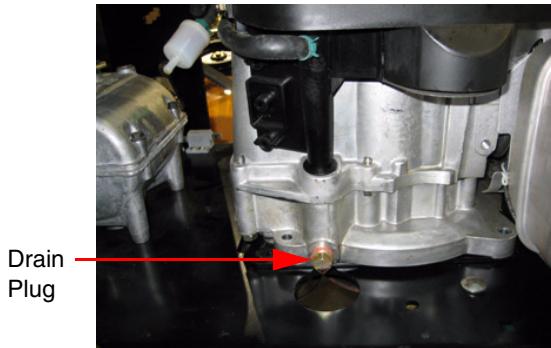


Figure 12

3. Refill oil through the fill tube to the level indicated as "full" on the dipstick. (See Figure 13)

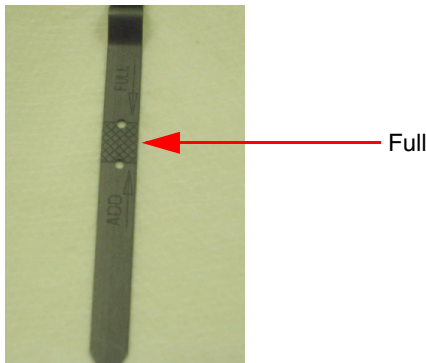


Figure 13

CHANGING THE AIR FILTER

1. Pull cover to open and expose filter.
2. Remove and replace filter.
3. Close cover.

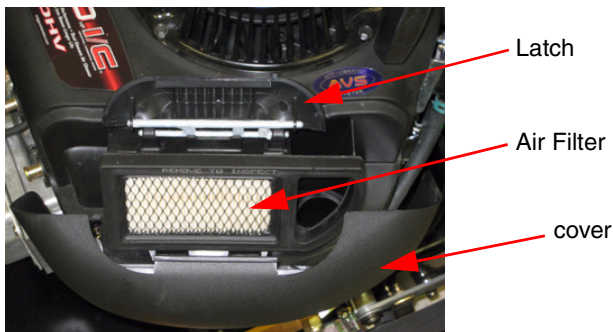


Figure 14

CHANGING THE FUEL FILTER

1. Squeeze the clamps on either side of the fuel filter hose, and move them away from the filter approximately one inch.
2. Pull the hoses off the filter.

3. Remove old filter and insert new filter into hoses, and move clamps near filter.

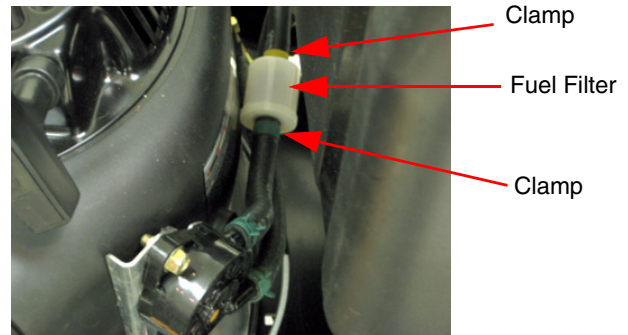


Figure 15

SERVICE SPARK PLUG



WARNING: Do not at any time make any adjustment to the unit without first stopping engine and disconnecting spark plug wire.

- Clean the spark plug and reset the gap to .030" at least once a season or every 50 hours of operation. See Figure 16. Spark plug replacement is recommended at the start of each season. Refer to engine parts list for correct spark plug type.

NOTE: Do not sandblast spark plug. Spark plug should be cleaned by scraping or wire brushing and washing with a commercial solvent.

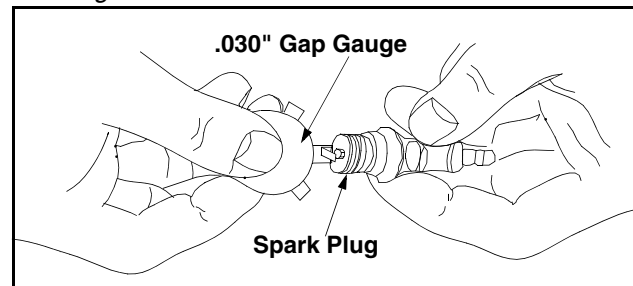


Figure 16

CHANGING A BLADE (See Figure 17 & 18)



WARNING: Mower blades are sharp. Wear gloves or wrap blades to protect yourself from the sharp edges.

1. Remove the deck cover.
2. Tip the mower back and block up the front of the deck.
3. Place one wrench on the hex head bolt under the blade. Use a second wrench to remove the locknut on top of the spindle pulley.
4. Remember the number of blade spacers both

above and below the spindle.

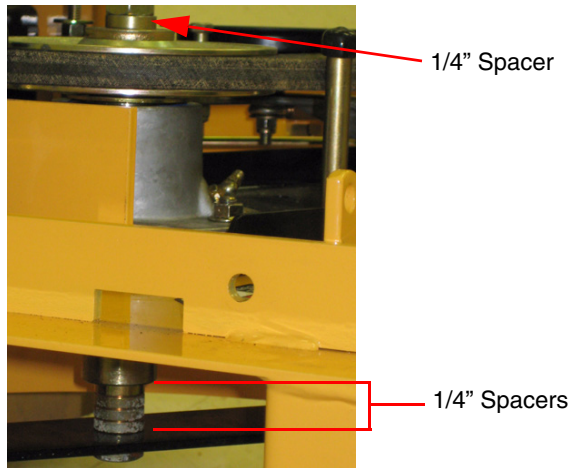


Figure 17

5. Remove the long (9-1/2") blade bolt, the flat washer, the blade and the blade spacers.
6. To replace the blade, reverse the above procedure. Be careful to replace the blade spacers correctly above and below the spindle. This is not a timed blade system and since blade overlap is provided, orientation is not important.



Figure 18

SHARPENING A BLADE

1. To sharpen a blade, clamp the blade in a vise and, using a flat mill file, carefully file the cutting surface on each end of the blade to a sharp edge.
2. Blades with severe nicks or dents that cannot be removed by filing should be replaced.
3. It is important that each cutting blade edge be ground equally to maintain proper blade balance. A poorly balanced blade will cause excessive vibration and may cause damage to the mower and result in personal injury. The blade can be tested by balancing it on a round shaft screwdriver. Grind metal from the heavy side until it balances evenly.

CHANGING THE BLADE DRIVE BELTS

(See Figure 19)

1. Make sure the blade clutch is disengaged.

2. Remove the deck cover. (This requires a 9/16" wrench)
3. Remove the cap screw which serves as a belt guide and is mounted in the idler pulley arm. (Item J, Figure 19.)
4. Slip the long blade drive belt off of the pulleys.
5. Place a new long blade drive belt through the belt guide and loop it around the engine pulley and then around the two deck pulleys. The belt's back side should ride on the idler pulley.
6. Replace the cap screw, lock washer and nut in the idler pulley arm.
7. The idler pulleys should be adjusted so that when the blade clutch is engaged, a ten-pound pull between two pulleys deflects either belt about 1/2" (See Figure 18.) Do not overtighten these belts. The blade clutch should engage with only moderate force.
8. Replace the deck cover, and secure with 9/16" nut.

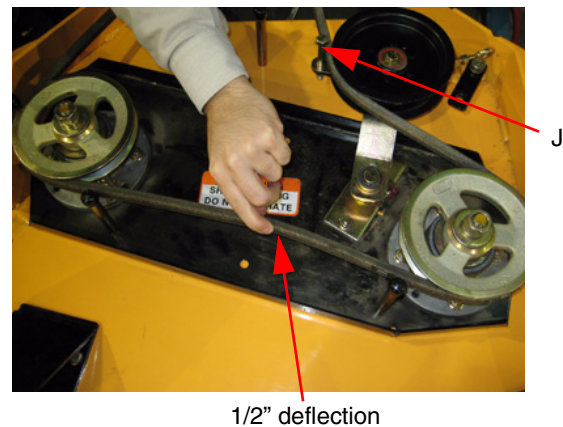


Figure 19

CHANGING THE TRANSMISSION DRIVE BELT: (See Figure 20)

1. Make sure the blade clutch is disengaged.
2. Working under the engine deck, take the long blade drive belt off of the engine pulley.
3. Loosen the locknut (item I, Figure 20) holding the transmission drive belt idler pulley in place and slide the pulley away from the transmission drive belt.
4. Remove the old belt and mount a new belt onto the pulleys.
5. Slide the idler pulley back onto the belt and tighten the locknut holding it in place. The idler pulley should be adjusted so that a five-pound pull on the belt between the engine pulley and the transmission pulley deflects the belt about 3/16".

- Replace the long blade drive belt on the engine pulley.

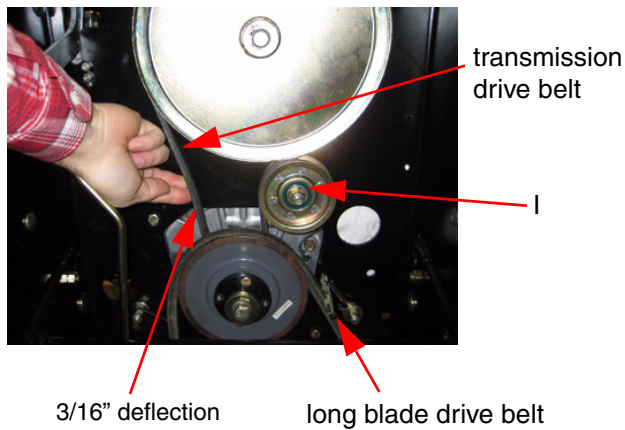


Figure 20

CHANGING EITHER TRACTION DRIVE BELT:

- Remove the hex screws which hold the belt guards in place. Remove the belt guards.

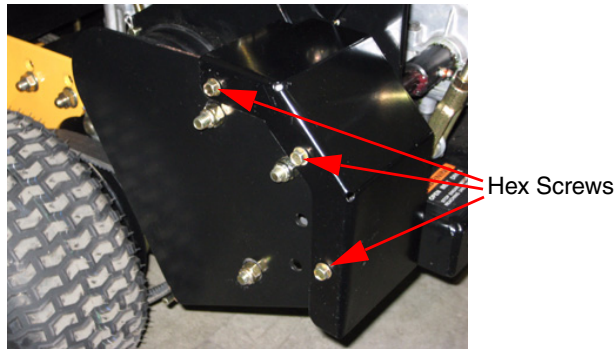


Figure 21

- Place the neutral latch lever in the neutral lock position.
- Remove the hairpin cotters from the two swivel joints which are inserted through the idler bracket and remove the swivel joints from the idler bracket.
- Lift up on the idler bracket with one hand while removing the belt from the jackshaft pulley with the other hand. (See Figure 22.)

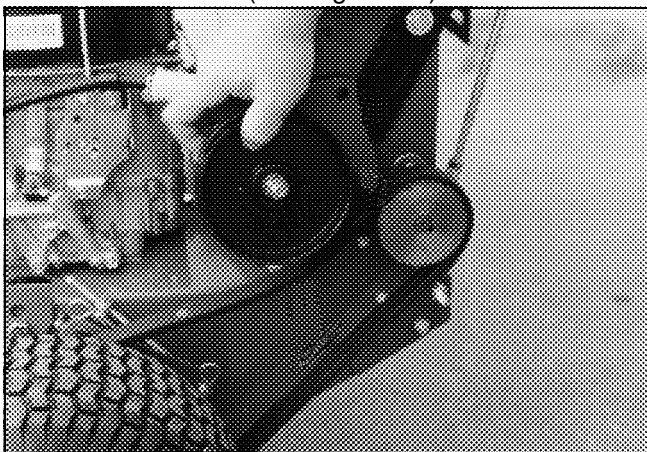


Figure 22

- Prop up the side of the mower and slip the belt over the drive wheel.
- Slip the new traction drive belt over the drive wheel and loop it over the jackshaft pulley while lifting up on the idler bracket.
- Insert the swivel joints in the holes in the idler bracket and replace the hairpin cotters.
- Replace the belt guards and the hex screws.

CHANGING A SPINDLE ASSEMBLY

- Make sure the blade clutch is disengaged.
- Remove the deck cover.
- Remove the blade. (See changing a blade on page 18.)
- Remove the blade drive belts. (See changing the blade drive belts on page 19.)
- Remove the pulley.
- Tip the mower back and block up the front of the deck.
- Remove the four bolts and locknuts holding the spindle assembly to the deck.
- Remove the spindle assembly.

SERVICE AND ADJUSTMENTS

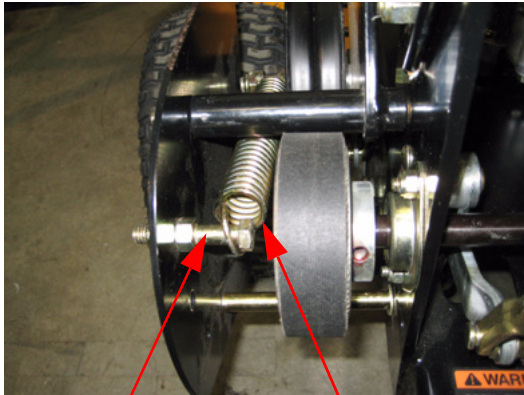


WARNING: Do not at any time make any adjustment to the unit without first stopping engine and disconnecting spark plug wire.

ADJUSTING THE CONTROL-FORCE

Three holes in the belt guard allow you to reposition the hex cap screw to adjust the brake lever. The top hole (lite tension), the middle hole (medium tension) and the lower hole (hard tension). The unit is shipped with the hex screw in the top hole. SEE FIGURE 25 BELOW FOR REFERENCE. To adjust the bolt do the following:

1. Remove the hex screws retaining the outer belt guard. (See Figure 21 page 20)
2. Remove the upper nut retaining the inner belt guard, and loosen the lower nut (DO NOT REMOVE). (See Figure 25)
3. With a spring puller, pull the spring and detach it from the hex cap screw. (See Figure 23)



Hex Cap Screw

Spring

Figure 23

4. Remove the lock nut from the lite touch hole in the inner belt guard. (See Figure 24)



Lock Nut

Figure 24

5. Pull the inner belt guard away from the unit. This will give clearance to remove the bolt. Note: If you

are having difficulty removing the bolt, continue to loosen the lower nut on the inner belt guard (BUT DO NOT REMOVE). Remove the bolt and nut. (See Figure 25)

6. Reposition the bolt and nut into the middle or lower hole and retighten the nut. (See Figure 25)
7. Using a spring puller, reattach the spring to the hex cap screw. (See Figure 23)
8. Reposition the inner belt guard, reinstall the upper nut, and retighten the lower and upper nuts. (See Figure 25)
9. Reposition the outer belt guard, reinstall the hex screws. (See Figure 21 page 20)

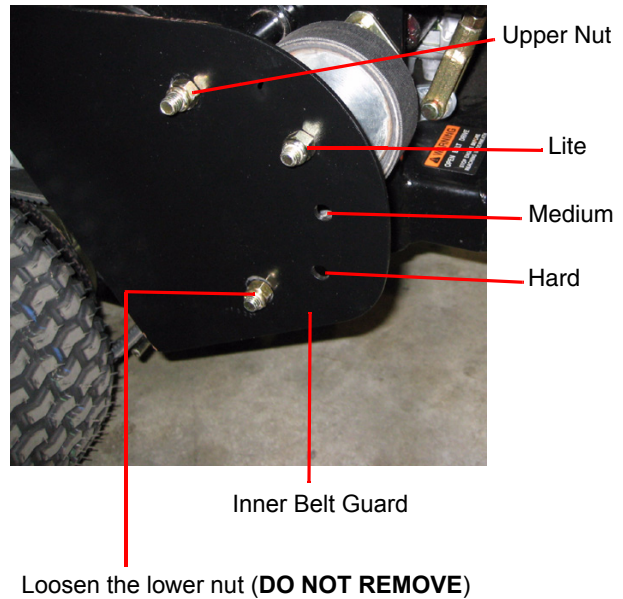


Figure 25

CUTTING HEIGHT ADJUSTMENT TABLE

Note: The front edge of the cutting deck should be 1/8" - 1/4" below the rear edge of the deck so that the blades are cutting grass in only the front half of their circular path. This decreases friction and reduces the drive power required.

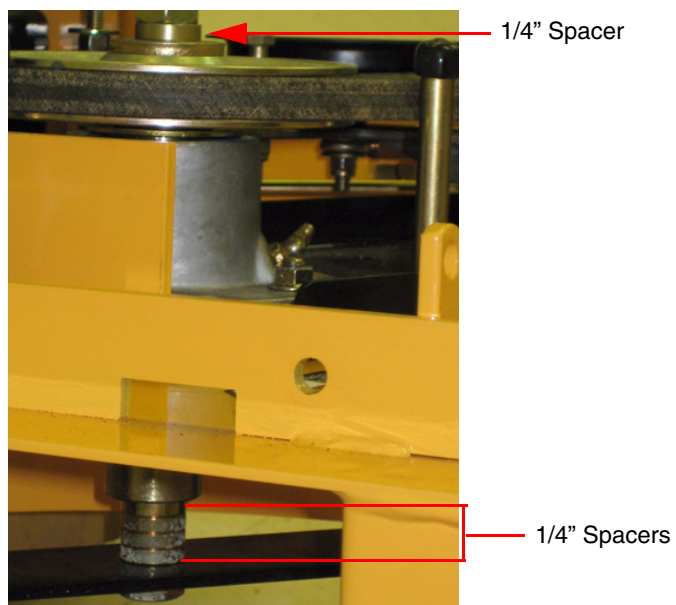


Figure 24

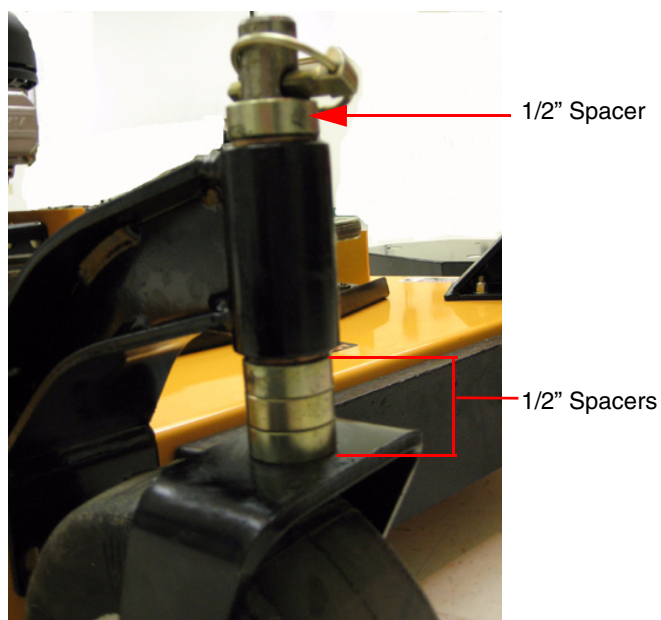


Figure 25

Approximate Cutting Height	1/4": Blade Spacers Above and Below The Spindle Assemblies (See Figure 24)		1/2" Caster Spacers Above and Below The Caster Bracket (See Figure 25)		
	Above	Below	Above	Below	
2	0	5	3	1	Engine Deck bolted to upper holes on cutting deck.
2-1/8	1	4	3	1	
2-3/8	2	3	3	1	
2-1/2	1	4	2	2	
2-3/4	2	3	2	2	
3	3	2	2	2	
3-1/4	4	1	2	2	
3-1/2	5	0	2	2	
2-3/4	0	5	2	2	
3	1	4	2	2	AS DELIVERED
3-1/4	2	3	2	2	Engine Deck bolted to lower holes on cutting deck.
3-1/2	3	2	2	2	
3-3/4	4	1	2	2	
3-1/4	0	5	1	3	
3-1/2	1	4	1	3	
3-3/4	2	3	1	3	
4	3	2	1	3	

MAINTENANCE SCHEDULE



WARNING

Before performing any type of maintenance/service, disengage all controls and stop the engine. Wait until all moving parts have come to a complete stop. Disconnect spark plug wire and ground it against the engine to prevent unintended starting. Always wear safety glasses during operation or while performing any adjustments or repairs.

Follow the maintenance schedule given below. This chart describes service guidelines only. Use the Service Log column to keep track of completed maintenance tasks.

Interval	Item	Service	Service Log
Each Use	1. Mower Blades 2. Loose or missing hardware 3. Belts 4. Engine oil level 5. Fuel level 6. Controls 7. Cutter Blade Spindle Bearings	1. As required 2. Tighten or replace 3. Check 4. Check 5. Check 6. Check for proper orientation 7. Lubricate	
1st 5 hours	1. Engine oil	1. Change	
40 hours	1. Engine oil 2. Air cleaner 3. Mower blades 4. Spark plug 5. Follow lubrication chart	1. Change 2. Clean or replace 3. Sharpen and balance 4. Clean, replace, re-gap 5. Lubricate	
Before Storage	1. Fuel System	1. Run engine until it stops from lack of fuel or add a gasoline additive to the gas in the tank.	

OFF-SEASON STORAGE



WARNING

Never store lawn mower with fuel in tank indoors or in poorly ventilated areas where fuel fumes may reach an open flame, spark, or pilot light as on a furnace, water heater, clothes dryer, or gas appliance. Never refuel or drain the fuel system indoors.

PREPARING THE ENGINE

For engines stored over 30 days:

1. To prevent gum from forming in fuel system or on carburetor parts, turn off the fuel valve, run the engine until it stops from lack of fuel or add a gas-oil additive to the gas in the tank. If you use a gas additive, run the engine for several minutes to circulate the additive through the carburetor, after which the engine and fuel can be stored up to six months.
2. While engine is still warm, change the oil.
3. Remove spark plug and pour approximately 1 oz. (30 ml) of clean engine oil into the cylinder. Pull the recoil starter several times to distribute the oil, and reinstall the spark plug.
4. Clean engine of surface debris.

PREPARING THE LAWN MOWER

- When storing the mower in an unventilated or metal storage shed, care should be taken to rustproof the non-painted surfaces. Using a light oil or silicone, coat the equipment, especially any springs, bearings, and cables.
- Remove all dirt from exterior of engine and equipment.
- Store equipment in a clean, dry area. Do not store in an area where equipment is present that may use a pilot light or has a component that can create a spark, or open flame.

ACCESSORIES AND ATTACHMENTS

PART NO.	DESCRIPTION
590-522-150	Bagger Grass Collector
590-512-150	Mulch Kit

TROUBLESHOOTING



WARNING

Before performing any type of maintenance/service, disengage all controls and stop the engine. Wait until all moving parts have come to a complete stop.

Disconnect spark plug wire and ground it against the engine to prevent unintended starting. Always wear safety glasses during operation or while performing any adjustments or repairs.

This section addresses minor service issues.

IMPORTANT: Before performing any troubleshooting, make sure: transmission is in Neutral, Neutral latches are locked on the control levers, blade clutch is disengaged and in the “OFF” position.

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> 1. Choke not activated 2. Throttle/choke control not in correct position 3. Spark plug wire disconnected 4. Faulty spark plug 5. Fuel tank empty or stale fuel 6. Blocked fuel line 	<ol style="list-style-type: none"> 1. Place throttle/choke control lever into choke position.. 2. Place throttle/choke lever into fast position. 3. Connect wires to spark plug. 4. Clean, adjust gap, or replace. 5. Fill tank with clean, fresh gasoline. 6. Clean the fuel line.
Engine runs erratically	<ol style="list-style-type: none"> 1. Unit running with choke applied 2. Spark plug wire loose 3. Stale fuel. 4. Water or dirt in fuel system. 5. Dirty air cleaner 	<ol style="list-style-type: none"> 1. Move throttle/choke lever out of choke position. 2. Connect and tighten spark plug wire. 3. Fill tank with fresh gasoline. 4. Drain fuel. Refill with fresh fuel. 5. Replace air cleaner cartridge.
Engine overheats	<ol style="list-style-type: none"> 1. Engine oil level low 2. Air flow restricted 	<ol style="list-style-type: none"> 1. Fill engine with proper amount and type of oil. 2. Clean grass clippings and debris from around the engine's cooling fins and blower housing.
Engine hesitates at high RPM's	<ol style="list-style-type: none"> 1. Spark plug gap set too close 	<ol style="list-style-type: none"> 1. Remove spark plug and adjust gap
Engine idles poorly	<ol style="list-style-type: none"> 1. Fouled spark plug 2. Dirty air cleaner 	<ol style="list-style-type: none"> 1. Replace spark plug and adjust gap. 2. Replace air cleaner cartridge.
Excessive vibration	<ol style="list-style-type: none"> 1. Cutting blades loose or unbalanced 2. Damaged, dull, or bent cutting blade 3. Loose hardware 	<ol style="list-style-type: none"> 1. Tighten blade and spindle. Balance blade. 2. Replace blade. 3. Tighten all nuts and bolts.
Unit fails to propel itself	<ol style="list-style-type: none"> 1. Drive belts loose or damaged 	<ol style="list-style-type: none"> 1. Replace drive belt.
Poor mowing performance	<ol style="list-style-type: none"> 1. Dull blade(s) 2. Broken, loose, or worn belt(s) 3. Blade(s) out of balance 	<ol style="list-style-type: none"> 1. Sharpen or replace blade(s). 2. Replace belt(s). 3. Balance or replace blade(s).

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and MTD Consumer Group Inc are pleased to explain the evaporative emission control system warranty on your 2008 lawn mower. In California, new lawn mowers must be designed, built and equipped to meet the State's stringent anti-smog standards. MTD Consumer Group Inc must warrant the EECS on your lawn mower for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your lawn mower.

Your EECS may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated emission-related components.

Where a warrantable condition exists, MTD Consumer Group Inc will repair your lawn mower at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This evaporative emission control system is warranted for two years. If any evaporative emission-related part on your equipment is defective, the part will be repaired or replaced by MTD Consumer Group Inc.

OWNER'S WARRANTY RESPONSIBILITIES:

As the lawn mower owner, you are responsible for performance of the required maintenance listed in your owner's manual. MTD Consumer Group Inc recommends that you retain all receipts covering maintenance on your lawn mower, but MTD Consumer Group Inc cannot deny warranty solely for the lack of receipts.

As the lawn mower owner, you should however be aware that MTD Consumer Group Inc may deny you warranty coverage if your lawn mower or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your lawn mower to MTD Consumer Group Inc's distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact the MTD Consumer Group Inc Service Department at 1-800-800-7310.

GENERAL EMISSIONS WARRANTY COVERAGE:

MTD Consumer Group Inc warrants to the ultimate purchaser and each subsequent purchaser that the lawn mower is: Designed, built and equipped so as to conform with all applicable regulations; and free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to that part as described in MTD Consumer Group Inc's application for certification.

The warranty period begins on the date the lawn mower is delivered to an ultimate purchaser or first placed into service. The warranty period is two years.

Subject to certain conditions and exclusions as stated below, the warranty on emission-related parts is as follows:

1. Any warranted part that is not scheduled for replacement as required maintenance in the written instructions supplied, is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by MTD Consumer Group Inc according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.
2. Any warranted part that is scheduled only for regular inspection in the written instructions supplied is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.
3. Any warranted part that is scheduled for replacement as required maintenance in the written instructions supplied is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by MTD Consumer Group Inc according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.
4. Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.
5. Notwithstanding the provisions herein, warranty services or repairs will be provided at all of our distribution centers that are franchised to service the subject engines or equipment.
6. The lawn mower owner will not be charged for diagnostic labor that is directly associated with diagnosis of a defective, emission-related warranted part, provided that such diagnostic work is performed at a warranty station.
7. MTD Consumer Group Inc is liable for damages to other engine or equipment components proximately caused by a failure under warranty of any warranted part.
8. Throughout the lawn mower warranty period stated above, MTD Consumer Group Inc will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
9. Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of MTD Consumer Group Inc.
10. Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claims. MTD Consumer Group Inc will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

WARRANTED PARTS:

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if MTD Consumer Group Inc demonstrates that the lawn mower has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. The following emission warranty parts are covered:

(1) Fuel Metering System

- Cold start enrichment system (soft choke)
- Carburetor and internal parts
- Fuel pump
- Fuel tank

(2) Air Induction System

- Air cleaner
- Intake manifold

(3) Ignition System

- Spark plug(s)
- Magneto ignition system

(4) Exhaust System

- Catalytic converter
- SAI (Reed valve)

(5) Miscellaneous Items Used in Above System

- Vacuum, temperature, position, time sensitive valves and switches
- Connectors and assemblies

(6) Evaporative Control

- Fuel hose certified for ARB evaporative emissions 2008
- Fuel hose clamps
- Tethered fuel cap
- Carbon canister
- Vapor lines

MANUFACTURER'S LIMITED WARRANTY FOR CUB CADET COMMERCIAL WIDE AREA WALK-BEHIND COMMERCIAL MOWER



IMPORTANT: To obtain warranty coverage owner may be required present proof of purchase and applicable maintenance records to the servicing dealer. Please see the operator's manual for information on required maintenance and service intervals. In addition, Cub Cadet may deny warranty coverage if the hour meter, or any part thereof, is altered, modified, disconnected or otherwise tampered with.

The limited warranty set forth below is given by Cub Cadet LLC with respect to new merchandise used for commercial and related purposes purchased and used in the United States and/or its territories and possessions, and by MTD Products Limited with respect to new merchandise purchased and used in Canada and/or its territories and possessions (either entity respectively, "Cub Cadet").

Cub Cadet warrants this product (excluding its *No-Fault Components*, and *Batteries* as described below) against defects in material and workmanship for a period of two (2) years from the date of original retail purchase or lease and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship.

Batteries have a one-year prorated limited warranty against defects in material and workmanship, with 100% replacement during the first three months. After three months, the battery replacement credit is based on the months remaining in the twelve (12) month period dating back to the original date of original sale or lease. Any replacement battery will be warranted only for the remainder of the original warranty period.

No-Fault Components include only belts, tires, seats and grass bags which are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of original purchase or lease.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE AND APPLICABLE MAINTAINCE RECORDS, through your local authorized service dealer. To locate the dealer in your area;

In the U.S.A.:

Check your Yellow Pages, or contact Cub Cadet LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-877-282- 8684, or log on to our Web site at www.cubcadetcommercial.com.

In Canada:

For all provinces excluding Quebec contact Modern Power Products d/o MTD Canada Ltd. At 60 Ottawa Street South, Kitchener, Ontario N2G 3S7 or call 1-800-567-6775 or log on to our website at www.cubcadet.ca.

In Quebec contact Les Distributions RVI Ltee. d/o MTD Canada Ltd. 2955 Jean-Baptiste Deschamps, Ville Lachine, Quebec H8T 1C5 or call 1-800-361-5770 or log on to our website at www.cubcadet.info.

This limited warranty does not provide coverage in the following cases:

- a. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
- b. Service completed by someone other than an authorized service dealer.
- c. For products sold or exported outside of the United States and/or Canada, and their respective possessions and territories, except those sold through Cub Cadet's authorized channels of export distribution.
- d. Damage or failure resulting from the use of defective or improper replacement parts and/or accessories other than genuine Cub Cadet parts.
- e. Transportation charges and service calls.
- f. Failure to operate and maintain the product in accordance with the Operator's Manual furnished with the product,
- g. Damages and failures resulting from misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster.

There are no implied warranties, including without limitation any implied warranty of merchantability or fitness for a particular purpose. No warranties shall apply after the applicable period of express written warranty above. No other express warranties beyond those mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Cub Cadet. The exclusive remedy is repair or replacement of the product as set forth above. The terms of this warranty provide the sole and exclusive remedy arising from the sale and/or lease of the products covered hereby. Cub Cadet shall not be liable for any incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights that vary in different jurisdictions.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of improper use, misuse or inability to use the product. This limited warranty shall not extend to anyone other than the original purchaser/Leasee or to the person for whom it was purchased or leased as a gift.